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REMARKS

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1-43 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over U.S. Patent No. 3,923,738 to Van Sorge. Applicants respectfully traverse this rejection.

U.S. Patent No. 3,923,738 to Van Sorge (hereinafter "Van Sorge") generally describes preparation of polyphenylene ether resins with narrow particle size distribution by precipitation from solution in an organic aromatic solvent with a non-solvent medium capable of forming a two-phase system with the aromatic solvent (abstract). The advantages taught by Van Sorge flow from the selection of a non-solvent composition capable of forming a two-phase system with the aromatic solvent, as opposed to a non-solvent composition that is not capable of forming a two-phase system with the aromatic solvent. Van Sorge does not teach or suggest a need to adjust the non-solvent composition once the precipitation has commenced, nor does Van Sorge teach or suggest how such an adjustment would be made.

Applicants' claim 1 is reproduced below for convenience:

> 1. A method of precipitating a poly(arylene ether), comprising:
> preparing a poly(arylene ether) solution comprising a poly(arylene ether) and a solvent;
> combining said poly(arylene ether) solution with an antisolvent to form a poly(arylene ether) dispersion comprising a poly(arylene ether) solid;
> separating said poly(arylene ether) solid from said poly(arylene ether) dispersion to form an isolated poly(arylene ether) solid;
> determining a particle size distribution of said poly(arylene ether) solid prior to said separating said poly(arylene ether) solid from said poly(arylene ether) dispersion; and
> adjusting a precipitation parameter in response to said particle size distribution.

Applicants' invention thus relates to a method of dynamically adjusting a precipitation parameter in response to a measured particle size.

Applicants' Claim 1 is patentable over Van Sorge because Van Sorge does not teach all elements of Claim 1. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A 1970). Applicants' Claim 1 includes the limitations "determining a particle size distribution . . ." and "adjusting a precipitation parameter in response to said particle size distribution." Van Sorge does not teach or suggest either of these limitations, and the Examiner has admitted as much. Paper 5, page 3, second full paragraph. A prima facie case has therefore not been established against Claim 1.

Applicants' Claim 1 is further patentable over Van Sorge because the cited art does not suggest the modification proposed by the Examiner. Even when a prior art reference may be modified, the desirability of the modification must be suggested by the art. *In re Gordon*, 733 F.2d. 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984)("The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification."). The Examiner has stated that

> it would have been obvious to one of ordinary skill in the art to modify the ternary composition diagram for the toluene-methanol-water system to satisfy the last two steps of the claims since they have been shown to be effective in a similar system and thus would have been expected to provide similar results.

Paper 5, page 3, fourth full paragraph. The Examiner offers no art-based support for his assertion that "the last two steps . . . have been shown to be effective in a similar system." Such support is lacking in Van Sorge. To the contrary, Van Sorge suggests that once a non-solvent capable of forming a two-phase system with the aromatic solvent has been selected, the precipitation parameters need not be adjusted. *See e.g.* Van Sorge at column 1, lines 9-60. Van Sorge therefore teaches away from the modification suggested by the Examiner. In summary, there is no suggestion in the cited art to modify Van Sorge, and Van Sorge itself teaches against the Examiner's proposed modification.

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For all of the above reasons, a prima facie case has not been established against Applicants' Claim 1. As Claims 2-43 each include or further limit all the limitations of Claim 1, they, too, are patentable over Van Sorge. Applicants therefore respectfully request the reconsideration and withdrawal of the rejection of Claims 1-43 under 35 U.S.C. §103(a) over Van Sorge.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance is requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 07-0862 maintained by Assignee.

Respectfully submitted,

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